

# **EXHIBIT C**

COMMONWEALTH OF PUERTO RICO  
OFFICE OF THE GOVERNOR  
ENVIRONMENTAL QUALITY BOARD

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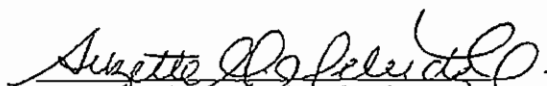
Pursuant to and in accordance with the Environmental  
Policy Act (Law No. 416 of September 22, 2004, as amended),

this

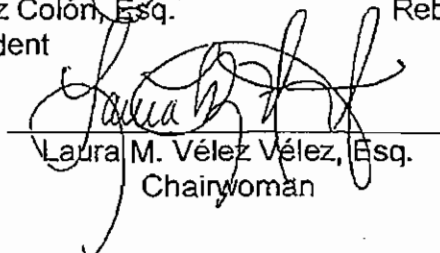
PUERTO RICO WATER QUALITY STANDARDS REGULATION,  
AS AMENDED, ON AUGUST 2014

Has been promulgated by Resolution Number R-14-31-1 to enhance, maintain and  
preserve the quality of the waters of Puerto Rico compatible with the social and  
economic needs of Puerto Rico.

Dated this August 19, 2014

  
Suzette M. Meléndez Colón, Esq.  
Vice-President

  
Rebeca I. Acosta Pérez, Esq.  
Associate Member

  
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Chairwoman

**RULE 1301 DEFINITIONS AND ACRONYMS****1301.1 DEFINITIONS****Acute Effect**

Organism response to a stimulus, detected during an acute toxicity test that comprises a stimulus of such severity that induces a quick adverse effect. In toxicity tests, an acute response is considered to occur in a period of 96 hours or less. An acute effect can take place through events that not necessarily involve the death of the organism.

**Acute Toxicity Test**

Toxicity Test designed to determine the concentration in which a response to a stimulus, such as a total effluent, specific substance or combinations of these, has sufficient severity to induce an adverse effect on a group of test organisms during a period of 96 hours or less; even if said effect is not necessarily the death of the organisms.

**Acute Toxicity Units (TU<sub>a</sub>)**

The reciprocal of the effluent concentration that causes 50% of the organisms to die in an acute toxicity test or induce a response halfway between the base line and maximum as defined by the following equation:

$$TU_a = \frac{100}{LC_{50} \text{ or } EC_{50}}$$

(The LC<sub>50</sub> or EC<sub>50</sub> is expressed as the percent (%) of effluent in the dilution water).

**Agent**

All the factors, including light and heat, which cause or could cause, induce or could induce, produce or could produce, influence or could influence, help or could help to cause variations or alterations in organisms or in the environment.

**Adverse Effect**

Refers to any human-induced change in the quality of a water body that may cause undesirable physiological reactions in humans, fish or other fauna or flora.

**Applicable Rules and Regulations**

See Rule 1306.1 (B).

### **Design Flow**

The critical flow used for steady state waste load allocation.

### **Designated Uses**

Refers to those uses specified in this Regulation for each water body or segment whether or not these uses are being attained.

### **Desirable Species**

Species indigenous to the area or introduced to the area because of ecological or commercial value.

### **Diffuser**

Structure which is connected to or is part of a submerged outfall provided with ports and whose function is to reduce the diameter of the outfall in order to increase the effluent exit velocity and obtain a better dilution in the receiving water body.

### **Dilution**

Dilution is the reduction of the concentration of a substance by mixing it with ambient waters, and is defined by the following equations:

a. Volumetric Dilution:

$$D = \frac{V_e + V_d}{V_e}$$

where;  
D = Dilution  
V<sub>e</sub> = Effluent volume  
V<sub>d</sub> = Dilution volume (receiving water body)

b. Flow Dilution:

$$D = \frac{Q_e + Q_d}{Q_e}$$

where;  
D = Dilution  
Q<sub>e</sub> = Effluent flow  
Q<sub>d</sub> = Dilution flow (receiving water body)

c. Concentration Dilution:

### **Existing Uses**

Those uses actually attained in the water body, on or after November 28, 1975, whether or not they are included in this Regulation.

### **Fecal Coliform**

The portion of the coliform group found in the intestinal tract of homoiothermic (warm blooded) animals and used as indicator of the potential presence of pathogenic organisms. This group of organisms is capable of producing gas from lactose broth in a suitable culture medium within 24 hours at  $44.5^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ .

### **Flocculating Agent**

Chemical agent, which enhances the agglomeration of suspended solids in a liquid.

### **FORM WLA-01**

Form required by the Board to present a waste load allocation application.

### **Frequency Curve**

As used in this Regulation, the term refers to a graph plotted on log probability paper, representing the lowest mean flow of 7 consecutive days against the probability, using the procedures described in Appendix C of the Environmental Quality Board Waste Load Allocation Guidelines.

### **Grab sample**

A single sample collected at a particular time and place that represents the composition of the water, air or soil only at that time and place.

### **Gray Waters**

Liquid and solid wastes from kitchens, bathrooms and water-using appliances except those that release or contain black waters.

### **Ground Waters**

Sub-surface waters present at or beneath the water table, including waters in caves and caverns when the presence of water results from the manifestation of the characteristics of the saturated zone beneath the water table.

### **Habitat**

The place where a population (e.g. human, animal, plant, microorganisms) lives and

**1302.2 SURFACE WATERS**

**A. Class SD**

All surface waters are classified SD, except those classified SE in accordance with Rule 1302.2 (B).

**B. Class SE**

Laguna Tortuguero, Laguna Cartagena and any other surface water body of exceptional quality or high ecological or recreational value which may be designated by the pertinent agency and adopted by the Board, through Resolution requiring this classification for protection of the waters.

**1302.3 GROUND WATERS**

**A. Class SG**

**This classification includes all ground waters as defined in this Regulation.**

existing uses.

DW = Protection of the water body for use as source of drinking water supply.

HH = Protection of the water body or aquatic life for reasons of human health.

- \* = Identifies a substance that may be a carcinogen. The HH Criteria is base on a carcinogenicity risk of  $10^{-5}$ .
- + = Identifies a priority pollutant.
- a = For the protection of ground waters with the potential to be used or that are used as source of drinking water supply, the applicable water quality standard is the Drinking Water (DW) or Human Health (HH) criteria. For those ground waters that flow into other water bodies, the applicable water quality standard for ground waters is the most stringent criteria resulting from the comparison between the standard applicable to the classification of the water body into which it flows and the DW or HH criteria applicable to ground waters.

### 1303.2 USE CLASSIFICATIONS AND WATER QUALITY STANDARDS FOR SPECIFIC CLASSIFICATIONS

#### A. Class SA

##### 1. Usages and Description

Coastal waters and estuarine waters of high quality or exceptional ecological or recreational value whose existing conditions shall not be altered, except by natural phenomena, as defined under this regulation, in order to preserve its natural characteristics.

##### 2. Standards

The concentration of any parameter, whether or not considered in this Rule, shall not be altered, except by natural phenomena as defined under this regulation. Substances reactive with methylene blue shall not be present.

#### B. Class SB

##### 1. Usages and Description

Coastal waters and estuarine waters intended for use in primary and secondary contact recreation, and for propagation and preservation of desirable species, including threatened or endangered species.

##### 2. Standards

###### a. Dissolved Oxygen

Shall not contain less than 5 mg/L, except when this value is depressed due to natural phenomena as defined under this regulation.

E. Class SE

1. Usages and Description

Surface waters and wetlands of exceptional ecological value, whose existing conditions shall not be altered in order to preserve its natural characteristics.

2. Standards

The concentration of any parameter, whether or not considered in this Rule, shall not be altered, except by natural phenomena, as defined under this regulation. Substances reactive with methylene blue shall not be present.

F. Class SG

1. Usages and Description

Ground waters intended for use as source of drinking water supply and agricultural uses including irrigation. Also, included under this class are those ground waters that flow into coastal, surface, and estuarine waters and wetlands as defined in this Regulation.

2. Standards

a. Dissolved Gases

The composition, combination and concentration of dissolved gases shall not be altered except by natural phenomena, as defined under this regulation.

b. Coliforms

Fecal coliforms shall not exceed 0 colonies/100 mL in any sample by the MF (Membrane Filter) method.

c. pH

Shall not be altered except by natural phenomena, as defined under this regulation.

d. Color

Shall not be altered except by natural phenomena, as defined under this regulation.

e. Turbidity